AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

1. (Currently Amended) A gas sampling assembly comprising:

a filter portion including a ~~substantially tubular~~ housing having an upstream first end and a downstream second end;

a sample collection portion including a body section having a sample chamber defined therein, wherein the body section is coupled to the downstream second end of the housing such that the housing and the body section define a unitary assembly, and wherein the body section includes an energy transmissive portion such that a constituent of a gas in the sample chamber is adapted to be monitored through the energy transmission portion; and

~~a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion; and~~

at least one ~~hydrophobic fiber~~filter element ~~disposed within~~operatively coupled to the housing~~, the fiber element having an upstream closed end and a downstream open end, wherein the upstream closed end is positioned proximate the upstream first end of the housing, and wherein the downstream open end is coupled to the termination block~~.

2. (Currently Amended) The gas sampling assembly of claim 1, wherein the filter element includes an upstream closed end and a downstream open end, and wherein the upstream closed end of the ~~fiber~~ filter element is a looped end formed by the ~~fiber~~ filter element being folded back on itself.

3. (Original) The gas sampling assembly of claim 1, further comprising a gas sampling line coupled to the upstream first end of the housing.

4. (Original) The gas sampling assembly of claim 3, further comprising a conduit in fluid communication with the sample chamber to permit communication of gases out of the sample chamber.

5. (Original) The gas sampling assembly of claim 1, wherein the housing and body section are integrally formed from a unitary material.

6. (Currently Amended) The gas sampling assembly of claim 1, wherein the body section includes:

a gas sample collection chamber defined in the body section upstream of the sample chamber ~~and downstream of the termination block~~, the gas sample collection portion configured to collect filtered gases therein; and

a conduit defined in the body section upstream of the sample chamber and downstream of the gas sample collection chamber, the conduit communicating the gas sample collection chamber with the sample chamber.

7. (Currently Amended) The gas sampling assembly of claim ~~1~~22, wherein at least one of the ~~hydrophobic fiber elements~~filter element is coupled to the termination block such that the downstream open end protrudes from a surface of the termination block in a direction toward the sample chamber.

8. (Currently Amended) The gas sampling assembly of claim ~~1~~22, wherein all of the ~~hydrophobic fiber~~ filter elements are coupled to the termination block such that the downstream open ends do not protrude from a surface of the termination block.

9. (Currently Amended) The gas sampling assembly of claim ~~1~~22, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein the housing includes a ~~fiber~~ filter chamber defined therein in which at least the upstream

closed ends of the ~~fiber~~ filter elements are located, wherein the body section includes a conduit communicating the sample chamber with a downstream end of the termination block, and wherein a diameter of the ~~fiber~~ filter chamber and a diameter of the conduit are substantially the same.

10. (Currently Amended) The gas sampling assembly of claim ~~1~~22, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein a plurality of ~~hydrophobic fiber~~the filter elements are coupled to the termination block such that the downstream open ends of the ~~hydrophobic fiber~~plurality of filter elements are disposed in a linear array.

11. (Currently Amended) The gas sampling assembly of claim 1, wherein the at least one filter element is a hollow hydrophobic fiber element ~~is hollow~~.

12. (Currently Amended) A sidestream gas monitoring system comprising:

(a) a sampling line having a first end ~~adapted to be connected to a patient circuit~~ and a second end for carrying a flow of gas from a patient circuit;

(b) a gas sampling assembly comprising:

(1) a filter portion including a ~~substantially tubular~~ housing having an upstream first end and a downstream second end, wherein the upstream first end is connected to the second end of the sampling line,

(2) a sample collection portion including a body section having a sample chamber defined therein, wherein the body section is coupled to the downstream second end of the housing such that the housing and the body section define a unitary assembly, and

~~(3) a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion, and~~

(4) at least one ~~hydrophobic fiber~~ filter element ~~disposed within~~operatively coupled to the housing~~, the fiber element having an upstream closed end and a downstream open end, wherein the upstream closed end is positioned proximate the upstream first end of the housing, and wherein the downstream open end is coupled to the termination block~~; and

(~~d~~c) a detecting system adapted to measure a constituent of gas contained within the sample chamber.

13. (Currently Amended) The system of claim 12, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein the upstream closed end of the ~~fiber~~ filter element is a looped end formed by the ~~hydrophobic fiber~~filter element being folded back on itself.

14. (Original) The system of claim 12, further comprising a conduit in fluid communication with the sample chamber to permit communication of gases out of the sample chamber.

15. (Original) The system of claim 12, wherein the housing and body section are integrally formed from a unitary material.

16. (Currently Amended) The system of claim ~~12~~23, wherein the body section includes:

a gas sample collection chamber defined in the body section upstream of the sample chamber and downstream of the termination block, the gas sample collection portion configured to collect filtered gases therein; and

a conduit defined in the body section upstream of the sample chamber and downstream of the gas sample collection chamber, the conduit communicating the gas sample collection chamber with the sample chamber.

17. (Currently Amended) The system of claim ~~12~~23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein at least one of the ~~hydrophobic fiber~~ filter elements is coupled to the termination block such that the downstream open end protrudes from a surface of the termination block in a direction toward the sample chamber.

18. (Currently Amended) The system of claim ~~12~~23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein all of the ~~hydrophobic fiber~~ filter elements are coupled to the termination block such that the downstream open ends do not protrude from a surface of the termination block.

19. (Currently Amended) The system of claim ~~12~~23, wherein the at least one filter element includes an upstream closed end and a downstream open end, wherein the housing includes a ~~fiber~~ filter chamber defined therein in which at least the upstream closed ends of the ~~fiber~~ at least one filter element is ~~elements are~~ located, wherein the body section includes a conduit communicating the sample chamber with a downstream end of the termination block, and wherein a diameter of the ~~fiber~~ filter chamber and a diameter of the conduit are substantially the same.

20. (Currently Amended) The system of claim ~~12~~23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein a plurality of ~~hydrophobic fiber~~ filter elements are coupled to the termination block such that the downstream open ends of the ~~hydrophobic fiber~~ plurality of filter elements are disposed in a linear array.

21. (Currently Amended) The system of claim 12, wherein the ~~hydrophobic fiber~~ filter elements are hollow and are formed at least in part from a hydrophobic material.

22. (New) The gas sampling assembly of claim 1, further comprising a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion, wherein the at least one filter element is coupled to the termination block.

23. (New) The system of claim 12, further comprising a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion, wherein the at least one filter element is coupled to the termination block.